Claims

1.   Process for managing isochronous resources in a communication network comprising at least two communication buses linked by way of a wireless transmission bridge, the bridge comprising for each bus a real portal connected to this bus, each portal being furnished with wireless communication means, characterized in that the process comprises the steps of:

      - modelling the wireless bridge by each real portal in the form of virtual buses and virtual bridges, each virtual bridge comprising two virtual portals;

      - emulating a global register of passband availability for the set of wireless links of the wireless bridge;

      - reserving passband with the global register for the virtual buses representing each wireless link participating in a communication between two real portals.

2.   Process according to Claim 1, characterized in that a wireless link is modelled in the form of a virtual bridge.

3.   Process according to Claim 1, characterized in that a wireless link is modelled in the form of a virtual bus.

4.   Process according to Claim 1, characterized in that a group of wireless links linking a group of portals having complete connectivity within a bigger network with partial connectivity is modelled in the form of a virtual bus.

5.   Process according to one of Claims 3 or 4, characterized in that each real portal emulates;

      - a virtual portal forming together with the real portal a bridge linking the communication bus connected to the real portal to a virtual so-called internal bus also emulated by the real portal;

AMENDED SHEET

- a virtual bridge for each wireless link with another real portal.

6.   Process according to Claim 2, characterized in that each real portal emulates:

5   - a virtual portal forming together with the real portal a bridge linking the communication bus connected to the real portal to a virtual so-called internal bus also emulated by the real portal;

- a virtual portal for each wireless link with 10 other portals of the wireless bridge, two virtual portals corresponding to the same wireless link between two real portals forming a virtual bridge representing the wireless link.

7.   Process according to one of Claims 4 or 5, 15 characterized in that it furthermore comprises the step of eliminating an internal bus and virtual portals connected thereto, and of contracting into a bridge the two orphan portals thus created, in the case where the real portal comprising the internal bus forms part of a 20 single wireless link.

8.   Process according to one of Claims 1 to 7, characterized in that it furthermore comprises the step of determining, by each real portal, the set of wireless links between the real portals.

25 9.   Process according to Claim 8, characterized in that the step of determining the set of wireless links comprises the steps of:

- identifying, by each real portal, the other real portals whose data reach it directly;

30   - transmission destined for all the other real portals of the wireless network, of the list of real portals with which a direct link exists;

- reception of the list compiled by each of the other portals.

35 10.   Process according to one of the preceding claims, characterized in that it also comprises the step of emulating a register of availability of isochronous channels for each virtual bus.

11.   Process according to one of the preceding claims, characterized in that the step of reserving passband with the global register comprises the instigating of a request for reserving passband with a

5   manager of isochronous resources of a virtual bus and for transmitting the request by the said manager of isochronous resources of the virtual bus to a software module managing the global register of passband availability.

10   12.   Process according to one of Claims 1 to 11, characterized in that the bridge comprises at least three portals.